Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) An isolated polypeptide comprising a polypeptide having the sequence X_1-R-X_2-R-X_3, wherein X_1, X_2 and X_3 are any amino acid.

2. (Original) The polypeptide of claim 1, wherein said polypeptide has at least seven amino acids.

3. (Currently amended) An isolated polypeptide selected from the group consisting of: GYRQRLE (SEQ ID NO:1), EYRYRSV (SEQ ID NO:2), GQRARIS (SEQ ID NO:3) and QARRRQS (SEQ ID NO:4).

4. (Cancelled).

5. (Original) An isolated polypeptide having one or more R-X-R sequences, wherein at least one R of an R-X-R sequence has been substituted with another amino acid, and wherein the substituted polypeptide is exported from the ER in an amount or at a rate greater than the unsubstituted polypeptide.

6. (Original) The isolated polypeptide of claim 5, wherein said polypeptide is CFTR.

7. (Previously presented) A polynucleotide encoding the polypeptide of claim 3.

8. (Original) A method for identifying a therapeutic agent for treating cystic fibrosis comprising:

(a) contacting at least one cell expressing an export-incompetent CFTR with a test agent under conditions allowing an interaction between the agent and a factor mediating or contributing to export-incompetence; and

(b) determining whether the agent increases the amount of said CFTR on the cell surface, where an increased amount of CFTR on the cell surface identifies a therapeutic agent for treating cystic fibrosis.

9. (Original) A method for identifying an agent that induces or increases transport of an export-incompetent protein comprising:

(a) contacting an export-incompetent protein with a test agent under conditions allowing an interaction between the agent and a factor mediating or contributing to export-incompetence; and

(b) determining whether the agent increases the amount or the rate of protein transported, where an increased amount of transported protein identifies an agent that induces or increases transport of an export-incompetent protein.

10. (Original) The method of claim 9, wherein said protein is a cell surface protein.

11. (Original) The method of claim 10, wherein said protein is CFTR.

12. (Original) The method of claim 9, wherein said protein is a secreted protein.

13. (Original) The method of claim 9, wherein said export-incompetent protein is expressed in a cell.

14. (Original) The method of claim 9, wherein said method is performed in vitro.

15. (Original) A method for treating a subject having cystic fibrosis, comprising administering to the subject a pharmaceutical formulation comprising a polypeptide having an R-X-R sequence in an amount effective for treating cystic fibrosis.

16. (Original) The method of claim 15, wherein the X amino acid of the R-X-R sequence is not alanine, asparagine or glutamate.

17. (Original) The method of claim 15, wherein said polypeptide has at least four amino acids.

18. (Original) The method of claim 15, wherein said polypeptide has at least seven amino acids.

19. (Currently Amended) The method of claim 15, wherein said polypeptide is selected from the group consisting of: GYRQRLE (SEQ ID NO:1), EYRYRSV (SEQ ID NO:2), GQRARIS (SEQ ID NO:3) and QARRRQS (SEQ ID NO:4).

20. (Original) A method for treating a subject having cystic fibrosis, comprising administering to the subject a pharmaceutical formulation comprising a nucleic acid encoding a polypeptide having an R-X-R sequence in an amount effective for treating cystic fibrosis.

21. (Original) A method for treating a subject having or suspected of having a physiological disorder associated with an export-incompetent protein, comprising administering to the subject a pharmaceutical formulation comprising a polypeptide having an R-X-R sequence in an amount effective for treating a physiological disorder associated with an export-incompetent protein.

22. (Original) The method of claim 21, wherein said physiological disorder or condition is selected from the group consisting of: macular dystrophy and Stargardt's disease.

23. (Original) The method of claim 21, wherein said export-incompetent protein is selected from the group consisting of: ion channels, ABC proteins, growth factors, immune regulators, adhesion proteins, hormones, clotting factors, hemostatic regulators and receptors thereof.

24. (Original) The method of claim 21, wherein the X amino acid of the R-X-R sequence is not alanine, asparagine or glutamate.

25. (Original) The method of claim 21, wherein said polypeptide has at least four amino acids.

26. (Original) The method of claim 21, wherein said polypeptide has at least seven amino acids.

27. (Currently amended) The method of claim 21, wherein said polypeptide is selected from the group consisting of: GYRQRLE (SEQ ID NO:1), EYRYRSV (SEQ ID NO:2), GQRARIS (SEQ ID NO:3) and QARRRQS (SEQ ID NO:4).

28. (Original) A method for inducing or increasing intracellular transport of an export-incompetent protein, comprising contacting a cell expressing an export-incompetent protein with a composition comprising a polypeptide having an R-X-R sequence in an amount sufficient for inducing or enhancing intracellular transport of the export-incompetent protein.

29. (Original) The method of claim 28, wherein said protein has an R-X-R sequence.

30. (Original) The method of claim 28, wherein said protein is a cell surface protein.

31. (Original) The method of claim 30, wherein said protein is an export-incompetent CFTR.

32. (Original) The method of claim 28, wherein said protein is secreted.

33. (Original) A method for identifying an agent that inhibits or disrupts an interaction between an R-X-R polypeptide and an ER retention factor comprising:

(a) incubating a polypeptide having an R-X-R sequence and an ER retention factor under conditions allowing their interaction;

(b) adding a test agent to said incubation; and

(c) detecting binding between said polypeptide and said ER retention factor, where decreased binding in the presence of the test agent identifies an agent that inhibits or disrupts an interaction between an R-X-R polypeptide and an ER retention factor.

34. (Original) The method of claim 33, wherein said method is performed in vitro.

35. (Original) The method of claim 33, wherein said polypeptide has at least 4 amino acids.

36. (Original) The method of claim 33, wherein the X amino acid of the R-X-R sequence is not alanine, asparagine or glutamate.

37. (Currently amended) The method of claim 33, wherein said polypeptide is selected from the group consisting of: GYRQRLE (SEQ ID NO:1), EYRYRSV (SEQ ID NO:2), GQRARIS (SEQ ID NO:3) and QARRRQS (SEQ ID NO:4).

38. (Original) A method for identifying an ER retention factor comprising:

(a) contacting a composition suspected of containing an ER retention factor with a polypeptide having an R-X-R sequence under conditions allowing interaction between said factor and said polypeptide; and

(b) detecting binding between said factor and said polypeptide, thereby identifying an ER retention factor.

39. (Original) The method of claim 38, wherein said method is performed in vitro.

40. (Original) The method of claim 38, wherein said polypeptide has at least four amino acids.

41. (Original) The method of claim 38, wherein said polypeptide has at least seven amino acids.

42. (Currently amended) The method of claim 38, wherein said polypeptide is selected from the group consisting of: GYRQRLE (SEQ ID NO:1), EYRYRSV (SEQ ID NO:2), GQRARIS (SEQ ID NO:3) and QARRRQS (SEQ ID NO:4).

43. (Original) A method for inhibiting degradation of a protein in a cell comprising contacting a cell with a polypeptide having an R-X-R sequence in an amount sufficient for inhibiting degradation of a cell surface or secreted protein.

44. (Original) The method of claim 43, wherein said protein is a cell surface protein.

44. (Cancelled)

45. (Original) A method for detecting the presence of an export-incompetent protein in a cell comprising contacting a cell with a polypeptide having an R-X-R sequence and detecting the intracellular transport of the protein.

46. (Original) The method of claim 45 wherein said intracellular transport is detected using an enzyme.

47. (Original) The method of claim 45 wherein said intracellular transport is detected by detecting the presence of the protein on the cell surface.

48. (Original) The method of claim 45 wherein said intracellular transport is detected by detecting secretion of the protein.

49. (Original) The method of claim 45, wherein said protein is CFTR.

50. (Previously presented) The method of claim 43, wherein said protein is secreted.

51. (Previously presented) A polynucleotide encoding the polypeptide of claim 1.

52. (Previously presented) A polynucleotide encoding the polypeptide of claim 2.

53. (Currently amended) A pharmaceutical formulation comprising an isolated polypeptide selected from the group consisting of GYRQRLE (SEQ ID NO:1), EYRYRSV (SEQ ID NO:2), GQRARIS (SEQ ID NO:3) and QARRRQS (SEQ ID NO:4).